

Habitual Aspect in Ancient and Modern Greek

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1. The Greek language has remained during its long history remarkably stable in respect of its morphology, syntax and lexicon, as has been commonly observed.¹ The conventional wisdom on the matter is that Greek has been particularly subject to conscious archaizing. It is therefore interesting to turn to an area within the rule systems of the language in which learned influence, owing to the subtle and elusive character of the principles involved, can have played at best a negligible role – that area which involves the semantic rules governing the choice of verbal aspect, or the distinction realized in sentences by the features ‘imperfective’ and ‘perfective’ (corresponding to present and aorist stems respectively). In this article I wish to look at an important class of structures in which the modal predicates such as ancient *δύναμαι* ‘can’, *δεῖ* ‘it is necessary’ (modern *μπορῶ*, *πρέπει*) take as their complements expressions referring to multiple events (as in, for instance, the Modern Greek *πρέπει νὰ πηγαίνω κάθε μέρα*, ‘I must go every day’).

1. This article represents an expanded version of a paper ‘Verbal aspect in Ancient and Modern Greek’ read at a joint session of the Modern Greek Studies Association and the American Philological Association in Atlanta, 1977, and much of the material in it occurs in a paper read at the Third International Conference in Historical Linguistics in Hamburg, 1977, to appear in the *Proceedings*. For bibliographical references and more detailed theoretical discussion see my ‘scenarios, modality and verbal aspect in Greek’ (*Language*, forthcoming). I am grateful to the John Simon Guggenheim Foundation for the award of a Fellowship which enabled me to devote twelve months (1974–5) to the study of verbal aspect in Modern Greek.

Before we proceed to more theoretical points let us consider what on the face of it is a quite striking statistical indication that in spite of the replacement of the Ancient Greek infinitive in modal complements by structures of *vá* + finite verb, the rules governing aspectual choice survive unscathed. A rough count of the aspect of such infinitives as are governed by *δεῖ* and *δύναμαι* in the New Testament showed that in a total of 282 instances the imperfective form comprised 89, or 32 per cent. In thirteen plays by the modern writer D. Psathas I counted 518 examples of the corresponding *πρέπει* and *μπορῶ* with imperfective complements in 149 cases, or 29 per cent of the total. A more detailed breakdown of the figures is given in Table I:

TABLE I

Verbal aspect in the complements of *δεῖ* and *δύναμαι* in the New Testament and of *πρέπει* and *μπορῶ* in thirteen plays by D. Psathas. Figures are given for positive and negative sentences

New Testament		Psathas		
<i>δεῖ</i>		<i>πρέπει</i>		
	Pos.	Neg.	Pos.	
Pf.	57	8	116	15
Impf.	34(37%)	8(40%)	51(30%)	6(29%)
<i>δύναμαι</i>		<i>μπορῶ</i>		
Pf.	49	84	105	133
Impf.	22(31%)	81(27%)	62(37%)	30(18%)

If we ignore the figures for negative sentences with *δεῖ* and *πρέπει*, which are probably too small to be of significance, we note that Hellenistic Greek shows a slight preference for imperfective *vis-à-vis* Modern Greek in positive structures with the strong modal 'necessary' and a more pronounced preference in negative ones with the weak 'possible'. Two hypotheses, not necessarily inconsistent, suggest themselves. One is that because choice of aspect depends essentially on semantic factors it may simply be that the sorts of meaning conveyed by New Testament structures are more likely to select

imperfective expressions (for instance, it might be that they more frequently refer to continuous or repeated action). Indeed it seems in general to be the case that the overall frequency of perfective forms increases as we approach the level of ordinary conversation, which presumably concerns the specific, concrete event types of everyday life, while in more abstract contexts they are less frequent. In Psathas himself, whose plays approximate by and large to the style of ordinary conversation, the overall frequency of perfective forms is about 85 per cent, while in abstract discussions such as are found in philosophical texts, the figure drops to about 70 per cent. The second hypothesis would be to the effect that the rules linking meaning and expression have undergone modification, although as the figures of Table I clearly indicate, such modification may have been marginal. On this explanation one might expect that modern translations of the New Testament would sometimes switch aspect, and an examination of two such translations (or perhaps 'paraphrases') showed that this was in fact the case, the switch being normally from imperfective to perfective. In the versions of P. N. Trembelas and I. T. Kolitsaras I counted six cases in which an original imperfective after $\delta\epsilon i$ had been replaced by at least one of the translators with the perfective; a similar replacement occurred in fourteen cases involving $\delta\sigma v\alpha μai$, ten of which involved negative sentences.² The converse switch with these modals did not seem to occur, although the deontic modal $\epsilon\zeta\epsilon\sigma t\iota$ is followed by the perfective $\delta\sigma v\alpha i$ in the three references to the episode of the tribute money, but by the imperfective form of 'give' in the modern translations.

It is not possible to comment sensibly on the differences and on the far more impressive resemblances between the aspectual systems of Hellenistic and Modern Greek, without some sort of theoretical framework incorporating an appropriate set of devices for representing the meaning of sentences and rules linking these to surface expression. The next section outlines some such theory for habitual aspect and this is then illustrated by a discussion of cases in which aspectual phenomena have

2. The references for $\delta\epsilon i$ are Luke 13:33, John 4:4, Acts 9:6, 16:30, 25:10, II Cor. 11:30, and for $\delta\sigma v\alpha μai$ (positive), Matt. 19:12, John 1:46, 9:16, Heb. 5:7 (negative), John 3:2, 3:27, 5:19, 5:30, 9:4, 9:33, 10:29, 12:39, 16:12, Acts 27:15.

apparently remained in general constant from the Hellenistic period to the present. A final section mentions two of the ways in which usage may have, and apparently has, changed.

2. Many sentences referring to indefinitely repeated events have a form something like ‘every time *p*, *q*’, which may be put a little more formally as (1).

(1) At all times *t* (if *p* at *t* then *q* at *t*)

Such expressions may be called (after Rescher 1966) ‘scenario expressions’. An example might be ‘every time he smokes, he coughs’. In Greek (and in Russian, which has an aspectual system functionally quite comparable to Greek) both the antecedent (*p*) and the consequent (*q*) are in the imperfective aspect, irrespective of tense. Thus, in the present, modern Greek has (2).

(2) *Κάθε φορά ποὺ καπνίζει βήχει*

‘Every time he smokes, he coughs.’

The past counterpart of this follows the same aspectual pattern (*κάθε φορά ποὺ κάπνιζε ἔβηχε*). Notice that the *t* in our scenario expressions is a variable over the time intervals associated with events, so that it corresponds roughly to the sense ‘occasion’ rather than to the ‘moments’ of conventional tense logic, which are represented as points along an abstract time dimension existing independently of events and governed by the axioms of denseness and continuity (that is, between any two moments there is always another, and the time line is without gaps). The rule may be stated as (3).

(3) When in the logical form of a sentence an event expression reflects the antecedent or consequent of a scenario expression (cf. (1) above), its main verb appears with imperfective aspect.³

3. I am grateful to one of this journal’s readers for citing two instances of κάθε φορά structures with the perfective (aorist) in both clauses: (a) ‘Πραγματικά μεγάλος μοῦ φάνηκε δὲ Καβάφης, κάθε φορά πού τόν συνάντησα οπτέι του . . .’ (Ι. Α. Σαρεγιάνη, Σχόλια στον Καβάφη, 1964, σελ. 40); (b) Κάθε φορά πού ήθεται στά τσαντήρια μας, ή Πείνα πήρε απρότια . . . (Π. Πρεβελάκη, Ό γλιος τοῦ θανάτου, Έστια, σελ. 168). The second is attributed to a Bulgarian

The cases which interest us are those in which a scenario expression is combined with a modal. Consider for example (4) and (5).

(4) *Μπορεῖς νάρθης δποτε θέλεις*
(5) *Μπορεῖς νάρχεσαι δποτε θέλεις*
‘You can come whenever you want.’

Although the English translation fails to indicate any semantic distinction, there are in fact two different ways of combining the scenario structure ‘at all times *t* if you want at *t* to come then you come at *t*’ with the modal ‘you are able’ (‘poss’). The modal may have the consequent alone, or it may have the whole scenario expression as its scope. The logical form displaying modalized consequent will be as in (6).

(6) At all times *t* (if you want at *t* to come then poss at *t* (you come))⁴

It will be noted that the ‘you want’ and the ‘poss’ are both associated with a universally bound *t* of a scenario expression and hence appear in imperfective aspect in Greek, while the ‘you come’ is not so associated and appears, as in (4), in the perfective. On the other hand the logical form corresponding to (5) will have the whole scenario within the scope of ‘poss’, so that both ‘you want’ and ‘you come’ will be associated with a universally bound *t* and assigned imperfective aspect (see 7).

(7) poss(at all times *t* (you want at *t* to come then you come at *t*))
The difference may seem subtle, and, as we shall see, in

speaker, and so might perhaps represent a deliberate infelicity. All I can suggest in the case of the first is that we do not have a scenario expression; that is, the sense is not that Cavafy appeared great every time the writer met him (but not necessarily at other times), but that he *was* great, and the writer was struck by this every time he met him. It is worth mentioning that the few native speakers with whom I have discussed these sentences find them correct but unnatural.

4. For readers unfamiliar with the conventions used here to indicate meanings, (6) may be roughly paraphrased as ‘at any time, if at that time you want to come, then it is possible at that time that you come’; similarly (7) would correspond to ‘it is possible that at any time if you want at that time to come, then you come at that time.’ The abbreviation poss of ‘possible’ is used to express the various notions ‘may’, ‘can’, ‘be able’, as well as ‘possible’ itself.

structures of this general type speakers do in fact display some degree of vacillation in the choice of aspect, for the reason that the action designated in the consequent (here ‘coming’) is often repeatable in the real world so that it makes sense for it to be universally quantified. In the case of actions such as marrying (for the first time) or dying, which can occur only once during the existence of a given individual, modalization of the complete scenario cannot occur. For instance a mother might say to her daughter ‘you may marry whenever you want’ in the sense ‘at all times t if you want at t to marry then Poss at t (you marry)’, in which ‘you marry’ is disassociated from the t and expressed in Greek by the perfective (*μπορεῖς σποτε θέλεις νὰ παντρευτῆς*). But the corresponding imperfective *παντρεύεσαι* does not occur as it implies that the mother is permitting the girl to marry as often as she wants, implying in turn a logical form ‘Poss’ at all times t (you want at t to marry then you marry at t).

3. Turning now to Hellenistic Greek let us first consider one or two cases which illustrate how the rules governing aspectual choice have persisted to the present day. The New English Bible translates Mark 14:7 as (8).

(8) ‘You have the poor among you always and you can help them whenever you like.’

πάντοτε γὰρ τοὺς πτωχοὺς ἔχετε μεθ’ ἑαυτῶν, καὶ δταν θέλητε δύνασθε αὐτοὺς εὖ ποιῆσαι

Helping the poor is presumably a repeatable event but the use of the perfective in the New Testament phrase is quite compatible with its being treated as a one shot affair, while the imperfective would indicate the logical form (10), which marks explicitly the possibility of indefinite repetition.

(9) Poss at all times t (if you want at t to help them then you help them at t)

It may be added that the distinction expressed in logical form by the relative left to right ordering of the universal quantifier and the modal predicate is in general mapped directly in terms of surface order, so that in this instance, just as we have in the logical form the order ‘at all times t ’, ‘poss’, so on the surface we have *δταν* ‘whenever’ than *δύνασθε* ‘you can’, although the New English Bible reverses this.

We saw above that in the case of nonrepeatable events (such as ‘marry *x*’) embedding under modals is associated uniquely with logical forms in which the modal has the event expression alone in its scope and never a complete scenario expression (since this would indicate repeatability of both antecedent and consequent event). We noted that with repeatable events there is often vacillation, and Modern Greek speakers will tend to accept as synonymous, or at any rate have great difficulty in paraphrasing differentially, pairs of sentences varying only in the aspect of complement clauses, in spite of what on our analysis would show up in logical form as differing relative scopes of the modal and universal temporal operator ‘at all times *t*’. For instance, in the course of an investigation conducted in 1975, 50 speakers were asked to select what they deemed to be the most appropriate aspectual choice in sentence (10), for which a context was provided referring to the rules governing the movements of reformatory inmates.

(10) *Οποτε θέλουν τὰ παιδιά μποροῦν νὰ βγαίνουν/βγοῦν*
 ‘whenever they want the boys may go out’

Informants were almost equally divided between imperfective *βγαίνουν* and perfective *βγοῦν*. The logical forms corresponding to these selections are as in (11) and (12).

(11) Poss at all times *t* (if they want at *t* to go out then they go out at *t*)
 (12) At all times *t* (if they want at *t* to go out then Poss at *t* (they go out))

The corresponding interpretations would presumably suggest paraphrases such as, respectively, ‘they have standing permission whereby they go out whenever they want’ and ‘whenever they want they are given permission *ad hoc* to go out’. It is therefore particularly striking that Hellenistic Greek seems to have displayed precisely this kind of indeterminacy. Consider the two passages meaning ‘is it permitted to cure people on the Sabbath or not?’

(13) *Ἐξεστι τῷ σαββάτῳ θεραπεῦσαι ἢ οὐ;* (pf.) (Luke 14:3)
 (14) *Εἰ ἔξεστι τοῖς σάββασι θεραπεύειν;* (impf.) (Matt. 12:10)

One may note that while this variation seems to carry little if any clear semantic contrast, it does imply that a surface parsing

based on considerations of logical form will bracket the sentences differently. The above versions (13) and (14) would correspond to (15) and (16) respectively.

(15) (Is it permitted to cure people) on the Sabbath?
(16) Is it permitted (to cure people on the Sabbath)?

Thus one principle which has persisted throughout at least two millennia is that which assigns imperfective to event expressions associated in logical form with the universally quantified *t* of scenario expressions. Another is somewhat more subtle and involves constructions which appear on the surface as lacking overt scenario features but which imply underlying scenario expressions. In particular we find that sentences such as ‘I can swim’, ‘I can read’, in which there is reference to general abilities, are assigned imperfective complements, while their negative counterparts show up with perfective. Furthermore we find that structures with deontic ‘may’ also follow the principle ‘positive: imperfective; negative: perfective’. For Modern Greek consider *μπορῶ νὰ κολυμπῶ* ‘I can swim’ (or more naturally *μπορῶ/ξέρω καὶ κολυμπῶ*) versus *μπορῶ νὰ κολυμπήσω*, and for Hellenistic Greek (17) and (18).

(17) οὐ πῶς δύνασαι λέγειν (impf.) τῷ ἀδελφῷ σου, Ἀδελφέ, ἄφες ἔκβάλω τὸ κάρφος τὸ ἐν τῷ ὀφθαλμῷ σου, αὐτὸς τὴν ἐν τῷ ὀφθαλμῷ σου δόκον οὐ βλέπων; (Luke 6:42)
‘How can you say to your brother “let me take the speck out of your eye” when you are blind to the plank in your own?’

(18) οὐ δύναται δὲ οὐ δόφθαλμὸς εἰπεῖν (pf.) τῇ χειρὶ, Χρείαν σου οὐκ ἔχω. (I Cor. 12:21)
‘The eye cannot say to the hand “I do not need you”’

My original view of the matter was that negation *per se* is a ‘variable constraint’ which favours the selection of perfective aspect, but this turned out to be a quite inadequate characterization of the situation. First of all, the statistical data of Table I do not indicate any tendency for negation as such to favour perfective aspect, at least if we ignore the case of modern *μπορῶ*, to be discussed later. Secondly, it is important to notice that as we formulated our rule it does not say that the imperfective is selected in verbs qualified by expressions

meaning ‘always’, only that in the logical form of sentences the event they describe will be associated with a universally bound t , and this may be the case even when in the surface sentence the adverbial is ‘never’. Consider for example (19), culled from a magazine article describing the duties of male geishas in Tokyo.

(19) *Μέσα στό συμβόλαιο ποὺ ύπογράφουν εἶναι καὶ ὁ δρος νὰ μὴ ζεκουμπώνουν ποτέ τὸ σακάκι τους*
‘In the contract they sign is the condition that they never unbutton their jacket.’

The problem is to explain how the complement clause ‘they never unbutton their jacket’ comes to have the imperfective *ζεκουμπώνουν*; for *prima facie* the appropriate logical form appears to be as in (20).

(20) NOT (there is a time t such that they unbutton their jacket at t)

The t associated with ‘unbutton their jacket’ is bound by the existential operator and there is no sign of the presence of a scenario expression in which the unbuttoning is indicated by the antecedent or consequent. A moment’s reflection will show, however, that (20) cannot be a correct representation, as what it implies is that the unfortunate subject unbuttons his jacket at no moment whatever in his life, even when in bed or under the shower. Clearly what is required is a formulation indicating that his jacket is not unbuttoned in certain unspecified conditions (e.g. in this case when a female client is present). Thus (22) would be nearer the mark (with p standing for these conditions).

(21) NOT (there is a time t such that p and they unbutton their jacket at t)

This formulation itself does not contain an explicit scenario expression, but the ordinary rules of predicate logic convert it readily to one which does contain the required structure (23).

(22) At all times t (if p at t then NOT (they unbutton their jacket at t))

Thus what counts is not the presence or absence of negation but rather of a scenario expression, in which the antecedent may be overt or implicit. In (17), for instance, it is overt, being specified

in the words ‘when you are blind to the plank in your own’, so that the sense implies a scenario (‘whenever you have a plank in your eye you say to your brother “let me take the speck out of your eye”’), and this is within the scope of the modal ‘you can’. As an example with implicit antecedent we have *τοὺς δυναμένους κολυμβᾶν* (impf.) (Acts 27:43) ‘those who could swim’. General physical abilities are exercised when certain appropriate conditions are present (e.g. here position at the surface of a suitably broad expanse of water). So how then do we account for the fact that the negative form of such sentences indicating ability tends to show perfective complements as in (18)? The reason appears to lie in the fact that while abilities rely for their implementation on the presence of appropriate conditions, lack of ability occurs irrespective of the presence of such conditions as are necessary for the existence of the ability itself. That is, to put it somewhat more formally, if ‘I can swim’ is expressed as ‘Poss at all times *t* if *p* at *t* then I swim at *t*’, the corresponding negative has rather the sense ‘NOT Poss there is a time *t* such that *p* and I swim and NOT Poss there is a time *t* such that NOT-*p* and I swim’, which by the usual rules of logic is equivalent to ‘NOT Poss there is a time *t* such that I swim at *t*’, a formulation from which no manipulation will derive the scenario expression needed for the selection of imperfective aspect.

Again we should note that what counts is not the presence of negative as such, for it is quite possible for a negated modal predicate to have an imperfective complement provided a scenario expression, covert or overt, comes within the scope of the modal. Thus, while I counted fifteen cases in the New Testament of negative sentences with *ἰσχύω* + perfective complement (e.g. *οὐδεὶς ἴσχυσεν αὐτὸν δῆσαι* ‘no one could bind him’, Mark 5:4), there is one instance of the imperfective (23).

(23) *οκάπτειν* (impf.) *οὐκ ἴσχύω, ἐπαιτεῖν αἰσχύνομαι* (Luke 16:3)

‘I am not able to dig, and too proud to beg.’

Here the first conjunct does not appear to mean that the subject cannot under any circumstances dig, as would be the case under the normal interpretation of ‘I cannot swim’, but that he cannot dig for a living, so that we have in effect within the scope of a modal a scenario expression with unspecified antecedent representing some such proposition as ‘it is working hours’.

4. While the rules governing the surface expression of scenario constructions within the logical forms of Greek have remained in general remarkably stable, shifts are possible in at least two respects. First of all there is evidence that in Hellenistic Greek modal predicates had wide scope in a broader range of cases than is now found. In particular I have found a class of examples involving the negative pronouns ‘no one’, ‘nothing’ and the weak modality operators corresponding to ‘can’, ‘may’. One example typical of several in the New Testament is (24).⁵

(24) *Οὐ δύναται ἀνθρωπος λαμβάνειν οὐδέν, ἐὰν μὴ ἡ δεδομένον αὐτῷ ἐκ τοῦ οὐρανοῦ* (John 3:27)

‘A man can receive nothing unless it has been given him by heaven.’

While ‘receive’ is in the imperfective aspect in this case, the modern translations select the perfective. The crucial expression would appear to have the logical form in modern Greek of (25).

(25) NOT there is a person x , a thing y , a time t such that POSS at t (x receive y) and NOT(y is given by heaven at t)

Manipulation according to the usual rules will convert this into a scenario expression but will still leave ‘ x receives y ’ outside the scope of the universal temporal quantifier (26).

(26) For all persons x , for all things y , at all time t , if NOT(y is given by heaven at t) then NOT POSS at t (x receives y)

For Hellenistic Greek we must place the temporal quantifier within the scope of the modal as in (27), which may then be converted to (28), in which it will be observed that ‘ x receives y ’ is associated with the universally bound t of a scenario expression, and hence realized by imperfective *λαμβάνειν*.

(27) NOT POSS there is a person x , there is a thing y , there is a time t , such that x receives y at t and NOT(y is given by heaven at t)

(28) NECESSARY for all persons x , for all things y , at all times t , if NOT(y is given by heaven at t) then NOT(x receives y at t)

5. The others are also in John: *οὐδεὶς γάρ ταῦτα τὰ σημεῖα δύναται ποιεῖν Δ σὺ ποιεῖς, ἐὰν μὴ ἡ σ Θεός μετ’ αὐτοῦ* (3:2), *οὐ δύναται δύνασθαι ποιεῖν Δφέαντοῦ οὐδέν* (5:30), *ἔρχεται νῦν, δτε οὐδεὶς δύναται ἐργάζεσθαι* (9:5), *εἰ μὴ ἡν οὗτος παρὰ Θεοῦ, οὐκ ηδύνατο ποιεῖν οὐδέν* (9:38), *οὐδεὶς δύναται ἀρπάζειν ἐκ τῆς χειρὸς τοῦ πατρός* (10:29).

It is difficult to know what to say about this class of cases except to point out that it is consonant with a possibly general trend in the development of Greek towards the selection of perfective over imperfective aspect. Thus, three of the cases listed in note 2 above involve the replacement of New Testament imperfectives by translational perfectives where the reference appears to be to impossibility on specific occasions, so that the concept of scenario is not relevant. That complements in these cases indicate events of some duration (*πιστεύειν*, *βαστάζειν*, *ἀντοφθαλμεῖν*) may suggest that lexical aspect (Aktionsart) interacted in Hellenistic Greek more strongly than it does in the modern language with grammatical aspect, although the facts are quite obscure.

In any case it is not easy to accept that one and the same meaning may be associated with different logical forms at different stages in the development of a language, and one obvious way out is to claim that the Hellenistic and Modern versions are not in fact synonymous in so far as the original sentence has a deontic force lacking in the modern translations. For although it would take us too far afield to argue the point, it is possible to see that the deontic predicates such as ‘ought’ and ‘may’ are in a sense atemporal, while physical ability may come and go according to external contingencies. This distinction between what we may term ‘diffuse’ as opposed to ‘distributed’ modality is represented in logical form by the relative scopes of the modal operators and the *t* variables. When the modal operators precede, as in (28), we have the diffuse modality represented on the surface by imperfective aspect.

Finally let us note an interesting example in which modern translations prefer an imperfective to ancient perfective, contrary to the tendency noted (29).

(29) *Ἐξεστί δοῦναι κῆνσον Καίσαρι; ή οὐ* (Matt. 22:17, cf. Mark 12:14, Luke 20:22)

‘Are we or are we not permitted to pay taxes to the Roman Emperor?’

Taxes represent regularly recurrent afflictions and we expect a logical form showing a scenario expression within the scope of the modal. The general idea being expressed would appear to correspond to, say (30).

(30) Poss at all times t , for all x , if (x is tax and x is due) at t then we pay x at t

Curiously enough, however, we find perfective $\delta oῦνται$. One can only speculate that the Pharisees viewed taxes as we might view unpredictable natural disasters like earthquakes and hurricanes and that their meaning was represented by (31).

(31) Poss there is a time, there is an x , such that x is tax and x is due and we pay x

Speculations apart, the basic thesis of this paper has been that the relation between verbal aspect and the semantic distinction single/repeated has on the whole persisted in a remarkably robust and constant manner throughout the history of Greek from the Hellenistic period to the present. If a rule system as subtle and elusive as that of verbal aspect can survive two millennia without benefit of pedantic prescriptivism it is perhaps worth while to consider whether in other and more tangible areas learned tradition has been allowed more credit (or blame) than it deserves.

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REFERENCES

Kolitsaras, I. T. *'H Καινὴ Διαθήκη*. Athens: 'H Ζωή, 1971.
Rescher, N. *The logic of commands*. New York: Dover Publications, 1966.
Trebelas, P. N. *'H Καινὴ Διαθήκη*. Athens: 'H Ζωή, 1955.